

WHAT IS CLAIMED IS:

1 1. A method of forecasting demand for a product, comprising:
2 generating an initial demand forecast by imposing onto a set of product
3 demand parameters a demand profile having a life cycle characterized by a
4 growth phase, a maturity phase and a decline phase; and
5 generating an event-adjusted demand forecast based upon a convolution of
6 the initial demand forecast with a set of one or more impact profiles each
7 representing an impact of a respective set of one or more events on product
8 demand over the product life cycle.

1 2. The method of claim 1, wherein the set of product demand
2 parameters includes an estimate of the mature demand for the product.

1 3. The method of claim 1, wherein the set of product demand
2 parameters includes estimates of one or more parameters representing a length of
3 the product life cycle.

1 4. The method of claim 3, wherein the life cycle length parameters
2 include length estimates for the maturity and decline phases of the product life
3 cycle demand profile.

1 5. The method of claim 1, wherein the set of product demand
2 parameters includes an estimate of stock-in demand relative to an estimate of
3 mature demand.

1 6. The method of claim 1, wherein one or more of the impact profiles
2 correspond to events having a multiplicative impact on demand for the product.

1 7. The method of claim 6, wherein among the multiplicative impact
2 profiles are a seasonality impact profile, a price drop impact profile, a promotions
3 impact profile, a competitive product introduction impact profile, and an
4 economic conditions impact profile.

1 8. The method of claim 1, wherein one or more of the impact profiles
2 correspond to events having an additive impact on demand for the product.

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9. The method of claim 8, wherein among the additive impact profiles are a deals impact profile, a constrained product introduction impact profile, a left-to-sell impact profile and an impact profile corresponding to a bundling event.

10. The method of claim 1, wherein the life cycle demand profile corresponds to a normalized monthly demand profile derived from historical demand data.

11. The method of claim 1, further comprising generating an inventory-adjusted demand forecast based upon a convolution of the event-adjusted demand forecast with a measure of channel inventory and sell-through impact on product demand.

12. The method of claim 11, further comprising computing the channel inventory impact measure based upon an estimate of aggregate channel weeks of supply.

13. The method of claim 12, wherein computing the channel inventory impact measure comprises computing a measure comparing the aggregate channel weeks of supply estimate and an estimate of an aggregate weeks of supply target for the channel.

14. The method of claim 13, wherein computing the channel inventory impact measure further comprises adjusting the comparison measure based upon an estimate of channel demand sensitivity to actual inventory levels relative to target inventory levels.

15. The method of claim 11, further comprising generating a demand-adjusted demand forecast based upon a convolution of the inventory-adjusted demand forecast with a measure of forecast error computed from a measure of actual demand and a measure of demand predicted by the inventory-adjusted demand forecast.

16. The method of claim 15, further comprising smoothing the measure of forecast error in accordance with an exponentially-weighted moving average function.

1 17. A computer program for forecasting demand for a product, the
2 computer program residing on a computer-readable medium and comprising
3 computer-readable instructions for causing a computer to:

4 generate an initial demand forecast by imposing onto a set of product
5 demand parameters a demand profile having a life cycle characterized by a
6 growth phase, a maturity phase and a decline phase; and

7 generate an event-adjusted demand forecast based upon a convolution of
8 the initial demand forecast with a set of one or more impact profiles each
9 representing an impact of a respective set of one or more events on product
10 demand over the product life cycle.

1 18. A system for forecasting demand for a product, comprising a
2 graphical user interface configured to:

3 display a demand profile having a life cycle characterized by a growth
4 phase, a maturity phase and a decline phase;

5 receive values for a set of product demand parameters;

6 display an initial demand forecast corresponding to the life cycle demand
7 profile modified in accordance with the set of product demand parameters;

8 display a set of one or more impact profiles each representing an impact of
9 a respective set of one or more events on product demand over the product life
10 cycle;

11 receive values for modifying one or more of the impact profiles; and

12 display an event-adjusted demand forecast corresponding to a convolution
13 of the initial demand forecast with one or more impact profiles.

1 19. The system of claim 18, wherein the graphical user interface is
2 configured to enable a user to selectively apply impact profiles to the initial
3 demand forecast.

1 20. The system of claim 18, further comprising a calculation engine
2 configured to:

3 compute an inventory-adjusted demand forecast based upon a convolution
4 of the event-adjusted demand forecast with a measure of channel inventory
5 impact on product demand; and

- 6 compute a demand-adjusted demand forecast based upon a convolution of
- 7 the inventory-adjusted demand forecast with a measure of forecast error
- 8 computed from a measure of actual demand and a measure of demand predicted
- 9 by the inventory-adjusted demand forecast.

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